



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,572	04/14/2004	Andreas Strasser	2940	6557

7590 06/14/2005  
STRIKER, STRIKER & STENBY  
103 East Neck Road  
Huntington, NY 11743

EXAMINER

BHAT, ADITYA S

ART UNIT PAPER NUMBER

2863

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/824,572	STRASSER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Aditya S. Bhat	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 1,10 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/14/04 11/02/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

Claim 1, 10 and 13 objected to because of the following informalities: *contactless* and *contactlessly* are not dictionary defined words and are grammatically incorrect.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Schaer et al. (USPN 6,786,683) .

With regards to claim 1, Schaer et al. (USPN 6,786,683) teaches a device for determining a reaching of a preset drill hole depth in a drill hole, which is drilled by a drilling tool of a drilling apparatus from a workpiece surface in a workpiece, the device comprising;

a measuring means which is mountable on and dismountable from the drilling apparatus for *contactless* measurement of an initial distance when a tip of the drilling tool abuts against the workpiece surface; (Col. 2, lines 56-59) and

means for computing an instantaneous distance to the workpiece surface as well as computing by a computing and comparing circuit a drilling progress from the measured initial distance and a measured instantaneous distance, and comparing the drilling progress with a preset drill hole depth. (Col. 2, lines 56-59)

With regards to claim 2, Schaer et al. (USPN 6,786,683) teaches a measuring means has an emitter and a receiver for wave signals, and an evaluation circuit for evaluation of wave signals emitted by said emitter to the workpiece surface and reflected from the workpiece surface to said receiver. (Col. 3, lines 1-9)

With regards to claim 3, Schaer et al. (USPN 6,786,683) teaches a input means for setting a desired drill hole depth. (Col.1, lines 53-56)

With regards to claim 4, Schaer et al. (USPN 6,786,683) teaches a storage for intermediately storing a parameter selected from the group consisting of the set drill hole depth and the measured initial distance. (Col.1, lines 53-56)

With regards to claim 5, Schaer et al. (USPN 6,786,683) teaches indicating means for indicating a parameter selected from the group consisting of the preset drill hole depth, the drilling progress, and the reaching of the preset drilling hole depth. (Col.2, lines 13-17)

With regards to claim 6, Schaer et al. (USPN 6,786,683) teaches indicating means includes a plurality of light diodes. (Col.3, lines 1-2)

With regards to claim 7, Schaer et al. (USPN 6,786,683) teaches indicating means includes a numerical indicator. (Col.3, lines 4-5)

Art Unit: 2863

With regards to claim 8 and 9, Schaer et al. (USPN 6,786,683) teaches measuring means includes an energy source, which is separate from an energy source of the drilling apparatus and means during mounting on the drilling apparatus is connectable to an energy source of the latter. Although, Schaer et al. (USPN 6,786,683) does not explicitly disclose a energy source It would be within reasonable interpretation to conclude that the drill taught by Schaer et al. (USPN 6,786,683) would have a energy source in order to power all of it's components.

With regards to claim 10, Schaer et al. (USPN 6,786,683) teaches drilling apparatus, comprising

a drilling tool; and (Refer to figure 1A)

a device for determining a reaching of a preset drill hole depth in a borehole which is drilled by said drilling tool from a workpiece surface in a workpiece, said device including measuring means which is mountable on and dismountable from the drilling apparatus for *contactless* measurement of an initial distance when a tip of the drilling tool abuts against the workpiece surface, and means for computing an instantaneous distance to the workpiece surface as well as computing by a computing and comparing circuit a drilling progress from the measured initial distance and a measured instantaneous distance, and comparing the drilling progress with a preset drill hole depth. (Col.2, lines 13-17) (Col. 1, lines 48-56)

With regards to claim 11, Schaer et al. (USPN 6,786,683) teaches device is removable. (Refer to figure 1A)

With regards to claim 12, Schaer et al. (USPN 6,786,683) teaches the drilling apparatus includes a drive motor; and further comprising an interruption switch located in a current circuit of said drive motor and controlled by said computing and comparing circuit. (Col.2, lines 6-13)

With regards to claim 13, Schaer et al. (USPN 6,786,683) teaches a method of drilling, comprising the steps of drilling a drill hole in a workpiece from a workpiece surface with a drilling tool of a drilling apparatus; determining a reaching of a preset drill hole depth from the workpiece surface at the working apparatus before the drilling of the borehole measuring an initial distance at which a tip of the drilling tool abuts against the workpiece surface, and during the drilling continuously *contactlessly* measuring an instantaneous distance from the drilling apparatus to the workpiece surface, continuously calculating a drilling progress from the measured initial distance and the measured instantaneous distance, and comparing the calculated drilling progress with a preset drill hole depth. (Col.1, lines 48-56)

With regards to claim 14, Schaer et al. (USPN 6,786,683) teaches indicating at least one parameter selected from the group consisting of the preset drill hole depth, the drilling progress and the reaching of the preset drilling hole depth on an indicator of the drilling apparatus. (Col.2, lines 13-17)

With regards to claim 15, Schaer et al. (USPN 6,786,683) teaches indicating at least one parameter selected from the group consisting of the preset drill hole depth, the drilling progress and the reaching of the preset drilling hole depth on a device arranged on the drilling apparatus. (Col.2, lines 13-17)

With regards to claim 16, Schaer et al. (USPN 6,786,683) teaches interrupting a current circuit of a drive motor of the drilling apparatus, upon reaching the preset drill hole depth. (Col.2, lines 55-56)

**Conclusion**

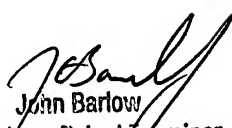
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Heizmann et al. (USPN 4968146) teaches an optical depth measuring device to be mounted on drilling power tool.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S. Bhat whose telephone number is 571-272-2270. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aditya Bhat

  
John Barlow  
Supervisory Patent Examiner  
Technology Center 2800